

## REMARKS

Applicant acknowledges the Office Action dated June 13, 1995, in which the Examiner rejected all claims pending in the application and objected to the Drawing and specification for several reasons. Applicant has amended the application and respectfully traverses the objections and rejections for the reasons set forth below.

### Objection to the Drawings

Applicant has submitted herewith a Proposed Drawing Amendment, in accordance with the Examiner's suggestion, and submits that the grounds for objecting to the drawings have been eliminated. The reference numeral "253," which refers to the stream of exhaust gases, has not been added to the Figure, as it appears in the original Figure, near the right-hand side.

### Objection to the Specification

Applicant respectfully traverses the Examiner's objection to the specification on the grounds that it fails to adequately describe the invention. Specifically, the Examiner has stated that it is unclear as to what delineates the heating and oxidizing sections of the drum. Applicant would respectfully remind the Examiner that the Applicant is entitled to be his own lexicographer. In the present case, the applicant has elected to designate that portion of the drum into which the oxygen feed line extends as "the oxidizing section" and to designate that portion of the drum to which heat is applied by the burner as "the heating section." Applicant submits that no further delineation is necessary, as the scope and extent of each section would be readily apparent to those skilled in the art reviewing the disclosure. The Applicant has not asserted that oxidization does not occur in the heating section, or that the oxidization section does not become heated. Rather, it is merely that these functions are not the primary function

or operation occurring in these respective sections. For these reasons, Applicant respectfully submits that no clarification is required.

In accordance with the Examiner's suggestions, on page 6 at line 13 the reference to a feed conveyer has been replaced by reference to a screw conveyer, so that reference numeral 114 is used consistently throughout. The stray underlying following the temperature of 500° on page 9 at line 15 has been deleted, and the Abstract and Title of the application have been amended to correspond with the claimed invention as suggested by the Examiner.

With respect to the Examiner's objection to the identification of reference numeral "304," the Applicant respectfully traverses. On page 8, lines 12-17, reference numeral 304 is introduced in conjunction with a liquid oil line. The Examiner's objection refers to page 8, line 19, which includes a reference to "oil feed line 340". Applicant submits that neither usage is inconsistent with the reference to a "liquid oil stream 304" that occurs on page 10 at line 15. For this reason, Applicant has not amended this aspect of the specification.

#### Section § 112 Objections

Applicant submits that the amendments to the specification cures the rejection of the claims based on the objections to the specification.

The Examiner also rejected claims 1-13 under § 112 on the grounds that the term "heat exchanger" in the preamble of each claim was indefinite. Applicant submits that the Examiner is being hypertechnical in this rejection. Nevertheless, Applicant has amended the preamble of each claim to replace the term "heat exchanger" with "apparatus for treating solid-containing waste". Applicant submits that this amendment cures the grounds for rejection.

With respect to the rejection of claim 1 for failing to structurally distinguish the oxidizing

section from the heating section, Applicant submits that no structural distinction is necessary. As set forth above, Applicant is entitled to be his own lexicographer. Applicant submits that one having ordinary skill in the art would clearly understand what is meant by the terms oxidizing section and heating section in that claim. Therefore, no amendment is necessary under § 112.

Claim 1 has been amended to indicate where the two outlets are structurally located relative to the other elements in the claim.

With respect to the rejection of claim 2 regarding the term "hot", the term has been replaced with the word "hotter" to indicate that the term is a relative one. Applicant submits, as amended, claim 2 conforms with § 112. Applicant submits that the terms, as used, merely identify separate ends of the heating section. Additional structural language has been added to further describe the location of the respective ends. Applicant submits that as amended claim 2 conforms with the requirements of § 112.

With respect to claim 3, the Examiner has stated that it is not clear where the condenser is structurally located relative to the other elements. Applicant traverses this rejection and asserts that no amendment is necessary. Claim 3 clearly recites that the condenser receives vapors from the drum and feeds an uncondensed portion of said vapors to said burner. Thus, its *operational* connection to the rest of the apparatus is clearly established. No further limitation or description is required by § 112. Nevertheless, the claim has been amended to recite a connection. If this is not sufficient, the Examiner is respectfully requested to provide an example of the type of "structural location" that is alleged to be lacking from the claim.

With respect to claim 5, the Examiner has stated that it is unclear where the drum is

sealed. Again, applicant traverses. The term "sealed" is well known generally and has only one meaning in the present context. That is, the requirement that the drum be sealed means that only the identified feed streams and outlet streams communicate with the inside of the drum. Although some seals are shown in the Figure, applicant submits that the claim reads on a sealed drum generally, rather than any particular seal location, and that this reading conforms with the requirements of § 112.

With respect to claim 6, the Examiner has stated that it is not clear where the oil spray chamber is structurally located relative to the other elements. Applicant traverses this rejection and asserts that no amendment is necessary. Claim 6 clearly recites that the oil spray chamber receives vapors from the drum. Thus, its *operational* connection to the drum is clearly established. No further limitation or description is required by § 112. Nevertheless, the claim has been amended to recite a connection. If this is not sufficient, the Examiner is respectfully requested to provide an example of the type of "structural location" that is alleged to be lacking from the claim. Similarly, claim 6 has been amended to recite an oil spray head. Applicant submits that the oil spray chamber of the present invention is sufficiently described in the specification to be understood by one skilled in the art and that, therefore, no further limitation is required.

With respect to the Examiner's rejections of claims 7-10, claims 7-8 have been amended to recite connections. Claims 9-10 have been canceled and their limitations added into the recitations of claim 1.

With respect to claim 11, claim 6 has been amended to recite a burner, thereby providing an antecedent for that element in claim 11. Claim 11 has been amended to avoid reference to

a solid removing section.

The Examiner has asserted that claims 8, 11 and 13 recite methods of use. Claims 8, 11 and 13 have been amended to recite structural limitations.

§ 102(b) Rejections of Claims 1 and 3-5

Applicant traverses the rejection of claims 1 and 3-5. Claim 1 has been amended to incorporate the limitations of canceled claims 9 and 10, namely an oil spray chamber connected downstream of the drum, with oil from the spray chamber passing through a cyclone and solid-concentrated oil from the cyclone being returned to the drum while the solid-free oil is returned to the spray chamber. Because these elements are not shown in the art, the § 102 (b) rejection is traversed. The allowability of these claims is discussed below.

§ 102(b) Rejections of Claims 6-8 and 12

Applicant traverses the rejection of claims 6-8 and 12. Claim 6 has been amended to require that the oil spray chamber include means for keeping the chamber sufficiently hot to prevent water from condensing in the oil. This limitation is supported in the specification on page 8. In contrast to the claim, Hogan '954 teaches the use of a cooler in the recycle line between the oil collector and the oil spray head. Nothing in Hogan '954 teaches or suggests the use of hot oil. The presently claimed invention is directly contrary to the prior art and therefore claim 6 and the claims depending from it are neither anticipated nor obvious.

§ 103 Rejections of Claims 1-5

Claim 1 has been amended as set out above. The § 103 rejection of claims 9 and 10 is now the most relevant grounds for rejection. The Examiner states that it would be obvious to "recirculate" solids from the scrubber to the drum because Hogan '954 teaches recirculating the

oil. This statement is unsupportable. Recirculation of liquids to their starting point has nothing to do with subsequent processing of solids. Applicant does not claim the concept of recirculation generally. Rather, applicant claims the specific concept, heretofore undisclosed, of removing particulates from vapors leaving a kiln by use of an oil spray, and returning those particulates to the kiln. Nothing in any of the cited references, and particularly Hogan '954, teaches or suggests such a concept. Furthermore, such a concept is counterintuitive, as the solids are being removed from the very drum from which they came. One reading Hogan '954 would be led to believe that returning the solids to the drum would merely result in the solids being entrained in the vapor again. Thus, the presently claimed concept is novel and unobvious and is patentable over the cited art.

Claims 2-5 depend from claim 1 and include further limitations thereto and are patentable as depending from an allowable base claim.

#### § 103 Rejections of Claim 11-12

Claims 11 and 12 depend from claim 6 and are allowable for the reasons set forth above.

#### § 103 Rejections of Claim 13

Claim 13 requires that hot gases be injected into the drum between the heating section and the oxidizing section. None of the references discloses such injection. In fact, the references tend to teach the use of gas flow, if any, from the end of the drum and along its length. Therefore, the injection of hot exhaust gases at a point downstream (with respect to solid flow) of the oxidization section is neither anticipated nor obvious.

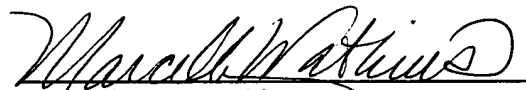
#### New Claim 14

A new claim 14 has been added which adds the limitation regarding the temperature of

the oil spray to the limitations of claim 1. Claim 14 is allowable for the reasons set forth above with respect to claims 1 and 6.

Conclusion

For all of the foregoing reasons, applicant submits that the claims as amended are allowable over the cited art. If the examiner has any questions or comments regarding the foregoing, she is encouraged to telephone the undersigned at (713) 238-8043.



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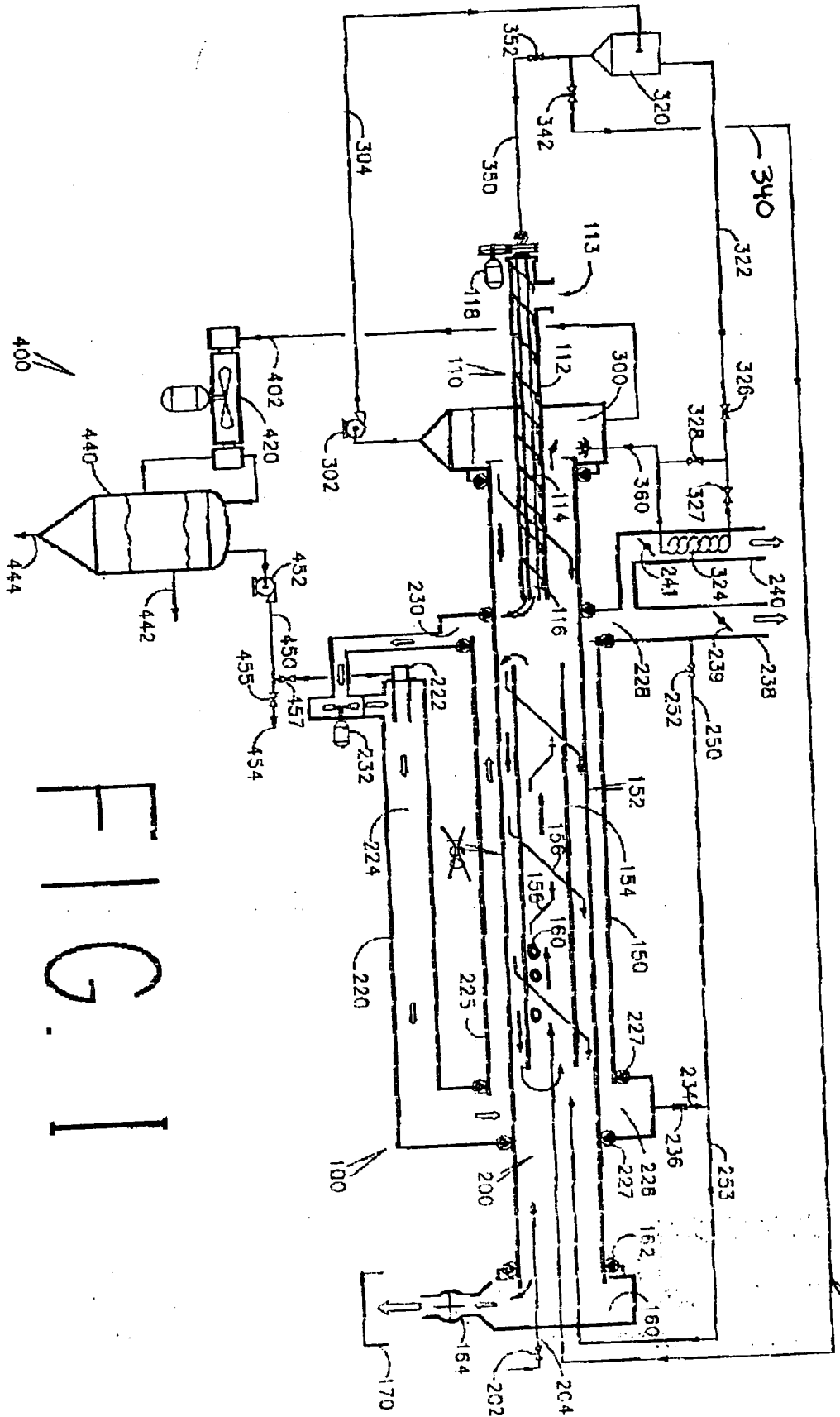


FIG. 1